

Individual Identify Friend or Foe (IIFF)

Purpose: To provide a device that will aid Marines in identifying combatants as either friend or foe in low light combat conditions.

Background: This project involves the development of a new IIFF device that is based on polymer light emitting technology which when interrogated by U.S. targeting lasers will identify combatants as friendlies. The device employs an active, tunable, infrared (IR) IFF device. Use of the devices will require minimal changes to equipment and Standard Operating Procedures and with appropriate Operational Security (OPSEC) measures could become part of the broader Fratricide Mitigation strategy.



Description: IIFF is a small American flag, coated with a material that generates a battery powered IR return to generation 4 night vision goggles. It is lightweight, OPSEC protected, and designed to work in low light combat situations. The device uses plastic substrates and light emitting polymer materials that require low-level voltages (~3-5 V) that can be battery-operated. This technology may be especially valuable for individual IFF where the operator is already heavily burdened with war fighting equipment and can ill-afford another cumbersome electronic device affixed to his body. The design upgrades the universally worn American flag patch (used as a passive visual IFF measure) and makes it an interrogatable, active IR emitting device suitable for low light situations.



Deliverable Product(s): The project will conclude with several operator assessments in the field that will inform a procurement recommendation for USMC, USA, USAF, and USSOCOM forces.

Milestones:

TASKS	FY06	FY07
LTA	▲▲	
Limited Op Assessment	▲	
Extended User Eval	▲▲	
Transition	▲▲	

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